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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,896	04/20/2004	Clement B. Edgar III	PA716D1C1	5845

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EXAMINER	
HOM, SHICK C	

ART UNIT	PAPER NUMBER
2471	

NOTIFICATION DATE	DELIVERY MODE
10/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/828,896	EDGAR ET AL.	
	Examiner	Art Unit	
	SHICK C. HOM	2471	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-14 and 18-24* is/are rejected.

7)☒ Claim(s) *11, 15-17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/5/09 have been fully considered but they are not persuasive.

Applicant remarked in the response that the terminal disclaimer of 3/3/2009 was inadvertently filed based on US 6,266,540 and that it should have been based on US 6,724,753 is not correct because a terminal disclaimer is needed base on each of the patents (see office action of 12/5/2008) and therefore the 3/3/2009 disclaimer will not be withdrawn.

In page 7 of the remark, applicant argued that the prior art, i.e. Lynch, discloses a single deskset and not multiple desksets is not persuasive because although Fig. 7 shows only one deskset 113, the invention of Lynch et al. relates to telecommunications and more particularly to mechanisms for serial communications interfaces, therefore clearly suggest use of more than one deskset, it would not be possible to communication with only one desket connected to the system.

While examiner agrees with applicant in page 8 of the remark, that the deskset 113 does not communicate with the serial port 302 but rather is simply used by the host computer 100 to exchange information on an ISDN line; however, the intent

of Fig. 7 is to show that the transceiver, i.e. the telecommunication device of Fig. 7, connected to the deskset 113 and communicating with a central station, i.e. host 100, via the serial port 302.

In response to applicant's argument in pages 9-11 against examiners reason and motivation for defining fields in the packet to include source, destination and error checking information as in Pisello et al. in the packet format of Lynch et al. is not persuasive because based upon Pisello et al. and the state of the art, a packet is merely a bundle of data to be transmitted including certain control information such as a header which in turn includes address of the destination, address of originating device, and error checking information although Lynch et al. do not recite these fields in a packet, the data unit of both the system of Pisello et al. and Lynch et al. exchange information via packets therefore it would be more efficient to define the packets of Lynch et al. based upon known standard definition of a packet in the design of the system, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill

in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for defining fields in the packet to include source, destination and error checking information; and an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check as taught by Pisello et al. in the data packet of Lynch et al. being that it provides more efficiency in the design of the system since the system uses standard and known method of interfacing with packets in a network as recited in Pisello et al.

Terminal Disclaimer

2. The terminal disclaimer of 8/5/2009 does not comply with 37 CFR 1.321(b) and/or (c) because:

An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 10, 12-14, and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,724,753. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims 10 and 22 merely broaden the scope of the U.S. Patent No. 6,724,753 claim 1 by eliminating

the step of sending a reboot command from the common node to said one of the terminals when the number of missed packets exceeds a predetermined threshold;

the step of sending a reboot command from the common node to said one of the terminals when a NAK is received at the common node from said one of the terminals; and

the steps of determining that a packet is new when the sequence number in the current packet is one greater than the sequence number in the previous packet; determining that a packet is repeated when the sequence number in the current packet equals the sequence number in the previous packet; determining that a packet is repeated when the sequence number in the current packet is N less than the sequence number in the previous packet, where N is a predetermined threshold; and detecting a bad sequence number otherwise. However, omitted step of sending a reboot command due to exceeded threshold and when a NAK is received is now recited in dependent claims 12 and 13, respectively, and the steps of determining packet is new or repeated is now recited in dependent claim 14.

It has been held that the omission of a element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969);

omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-5, 19-20, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch et al. (5,938,748) in view of Pisello et al. (5,491,812).

Regarding claims 1-5, 19-20:

Lynch et al. disclose a telephone (Fig. 1 shows the telecom device connected to the telephone line) apparatus, comprising:

a transceiver that communicates with a central station (Fig. 7 shows the transceiver communicating with a central station, i.e. host 100);

a plurality of desksets; and

an interface bus that permits said desksets to communicate with said transceiver (Fig. 7 shows the deskset 113 communicating with by transceiver using the interface bus 315) exchanging packets with the transceiver (col. 10 line 61 to col. 11 line 11 recite the data being packets and col. 11 lines 56-64 recite the parity bit included in the data) as in claim 1; and wherein each packet further comprises a start of header (SOH) byte that indicates the start of the packet (col. 11 line 56 to col. 12 line 7 recite the use of the start bit) as in claim 5.

Lynch et al. disclose all the subject matter of the claimed invention with the exception of each packet including source, destination and error checking information as in claim 1; each

packet comprising: an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error Checking as in claim 2; wherein said BCC is produced by a longitudinal parity check as in claim 3; wherein said BCC is produced by a cyclic redundancy Check as in claim 4. Although Lynch et al. do not disclose a wireless communication link and a base station as recited in claims 23-24, examiner takes official notice that wireless communication link including a base station is well-known in the art.

Pisello et al. from the same or similar fields of endeavor teach that it is known to provide whereby each packet including source, destination and error checking information; each packet comprising: an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check (Figs 3-4 shows the packet format including source, destination and error checking information; further each packet comprising: an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte;

an argument (ARG); and a block check character (BCC) for error Checking).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide whereby each packet including source, destination and error checking information; each packet comprising: an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check as taught by Pisello et al. in the data transfer mechanism of Lynch et al.

The packet including source, destination and error checking information; each packet comprising: an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check can be implemented by defining fields in the packet to include source, destination and error checking information; and an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check

character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check of Pisello et al. in the packet format of Lynch et al. The motivation for defining fields in the packet to include source, destination and error checking information; and an address (ADDR) byte that includes source and destination addresses of the packet; a command (CMD) byte; an argument (ARG); and a block check character (BCC) for error checking; and wherein said BCC is produced by a longitudinal parity check; wherein said BCC is produced by a cyclic redundancy Check as taught by Pisello et al. in the data packet of Lynch et al. being that it provides more efficiency in the design of the system since the system uses a known method of interfacing with packets in a network.

7. Claims 6-9, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch et al. (5,938,748) and Pisello et al. in view of Azarya et al. (5,978,578).

For claims 6-9, 18, and 21, Lynch et al. and Pisello et al. disclose the telephone apparatus described in paragraph 6 of this office action. Lynch et al. and Pisello et al. disclose all the subject matter of the claimed invention with the

exception of wherein said interface bus comprises a pair of conductors as in claim 6; wherein said interface bus comprises an unshielded twisted pair as in claim 7; wherein said interface bus comprises an EIA-485 interface as in claim 8; wherein a media access layer of said interface bas is carrier sense multiple access with collision detect as in claim 9; and wherein each deskset has a different pre-assigned time-out periof for each terminal as in claims 18 and 21.

Azarya et al. from the same or similar fields of endeavor teach coupling between networks whereby it is known to provide wherein said interface bus comprises a pair of conductors; wherein said interface bus comprises an unshielded twisted pair; wherein said interface bus comprises an EIA-485 interface; wherein a media access layer of said interface bas is carrier sense multiple access with collision detect (col. 12 line 63 recite the use of a bus in a network being a twisted pair cable and using CSMA for bus arbitration and col. 16 lines 50-56 recite the use of EIA-485 bus); and wherein each deskset has a different pre-assigned time-out period for each terminal (col, 17 line 43-55 recite the wait time before re-trying clearly reads on the pre-assigned time-out period).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to

provide wherein said interface bus comprises a pair of conductors; wherein said interface bus comprises an unshielded twisted pair; and wherein said interface bus comprises an EIA-485 interface; and wherein a media access layer of said interface bas is carrier sense multiple access with collision detect as taught by Azarya et al. in the apparatus of Lynch et al. and Pisello et al.

The interface bus comprising a pair of conductors; wherein said interface bus comprises an unshielded twisted pair; wherein said interface bus comprises an EIA-485 interface; and wherein a media access layer of said interface bas is carrier sense multiple access with collision detect can be implemented by using the pair of conductors; wherein said interface bus comprises an unshielded twisted pair; and wherein said interface bus comprises an EIA-485 interface and using CSMA of Azarya et al. for connecting the terminals and transceiver of Lynch et al. and Pisello et al.

The motivation for providing the interface bus comprising a pair of conductors; wherein said interface bus comprises an unshielded twisted pair; and wherein said interface bus comprises an EIA-485 interface; and wherein a media access layer of said interface bas is carrier sense multiple access with collision detect as taught by Azarya et al. in the communication

apparatus of Lynch et al. and Pisello et al. being that it provides more efficiency for the system since the system uses lower cost pair of conductors, i.e. an unshielded twisted pair, as a bus for connecting the terminals and more efficiency for the system because it uses a well-known standard bus, i.e. EIA-485 bus interface, for communication and CSMA standard for bus arbitration.

Allowable Subject Matter

8. Claims 11 and 15-17 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHICK C. HOM whose telephone number is (571)272-3173. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/
Supervisory Patent
Examiner, Art Unit 2471

SH